

BIOPROTECTION

English

Mother cultures & BioLab

Breeding lines, controlled production
and repeatable quality

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bioprotection.net



Conceptual visualization

01 / 08

Three separate mother lines

The starting material is three lines of the same predatory mite species. Each line stays separate and receives its own feeder mite.

The published example uses *Transeius montdorensis*. The feeder species differ; the predator species does not.



Conceptual visualization

Feed begins with its own substrate

Each feeder culture has its own prepared substrate and handling protocol. It supports one of the three predator lines.

Line 1

Feeder mite

Lepidoglyphus destructor

Line 2

Feeder mite

*Thyreophagus
entomophagus*

Line 3

Feeder mite

Carpoglyphus lactis

Separate preparation and culture records keep the lineage and its food source identifiable.

Crossing in two stages

Crossing combines inherited traits from three lines. The goal is heterosis: offspring with improved vigor.

First cross

$$\mathbf{L1 \times L2 \rightarrow H12}$$

Second cross

$$\mathbf{H12 \times L3 \rightarrow H123}$$

H12: Intermediate offspring

H123: Three-line population

This sequence is described in RU2757111C1, published on 11 October 2021.

Reproducibility needs records

A line identifier connects the mother culture to its feed, operation dates and growing conditions.

Quality samples make it possible to compare batches and investigate changes before they spread.



Conceptual visualization

BioLab connects production steps

Substrate preparation, growing cultures, quality checks and dispatch belong to one production workflow.

BioLab is designed to bring line records, climate observations and sample results into the operator's view.

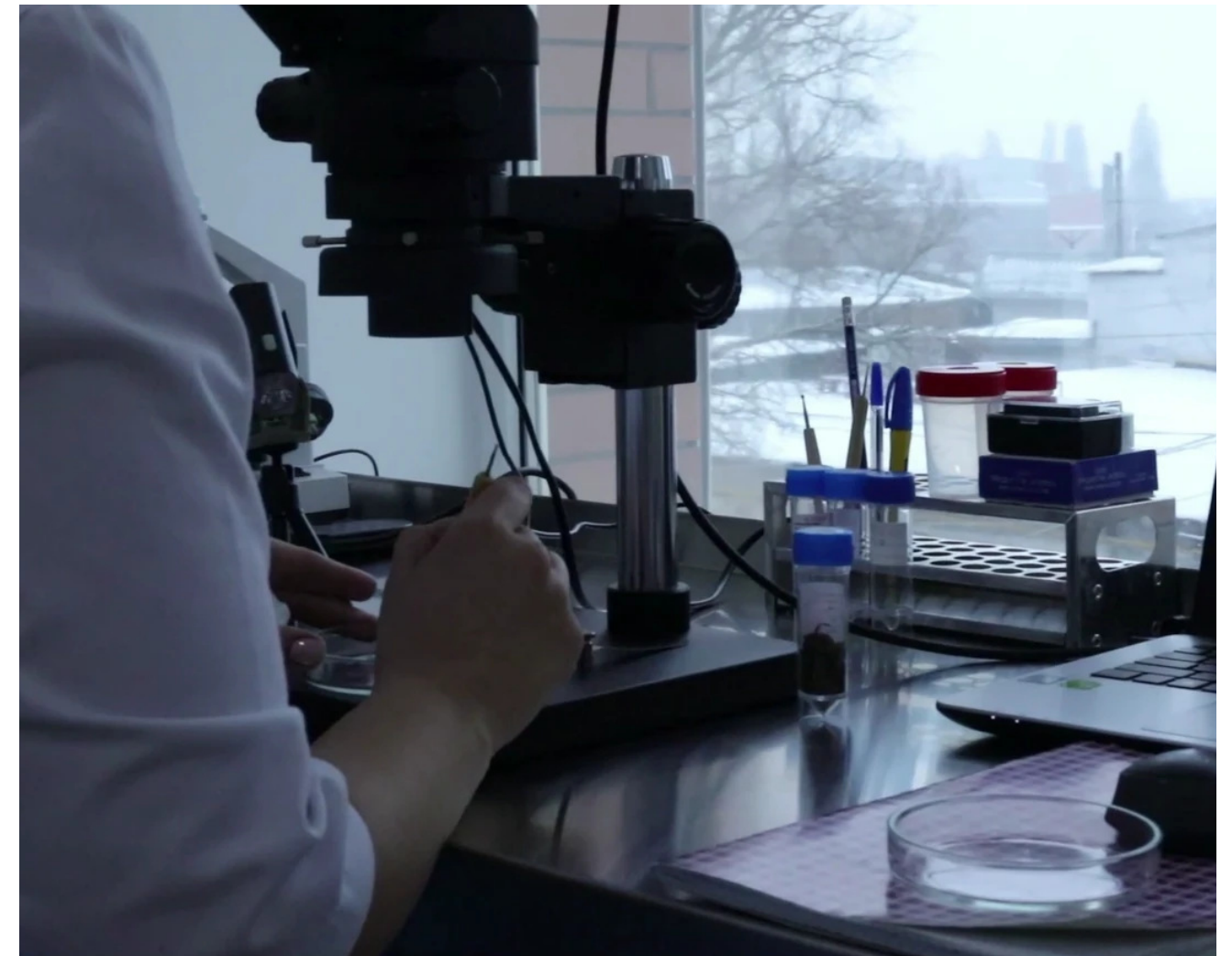


Archive footage frame

Quality before dispatch

Count and viability are checked alongside culture condition. A batch decision refers to its recorded production history.

The breeding method is a process foundation; the quality of each shipment still needs measurement.



Archive footage frame

Your production project

The project defines mother cultures, equipment, operating protocols, acceptance checks and team training.

BioLab integrations are configured per project. The breeding technology is described in Russian patent RU2757111C1.

Sources and project scope

RU2757111C1 · 11.10.2021

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Conceptual visualization